Short Communications

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Eastern Bluebird Provisions Nestlings with Flat-headed Snake

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ABSTRACT.—There are few published reports of Eastern Bluebirds (*Sialia sialis*) taking vertebrate prey or provisioning their young with vertebrates. We report finding a dead flat-headed snake (*Tantilla gracilis*) in an Eastern Bluebird nest. Flat-headed snakes feed primarily on soft-bodied invertebrates; thus, it is unlikely that the snake was attempting to depredate the bluebird nestlings. Moreover, flat-headed snakes are fossorial and rarely occur in open habitats. Therefore, the snake was most likely captured by one of the adult bluebirds and brought to the nestlings as a food item. *Received* 7 November 2003, accepted 4 November 2004.

With the exception of shrikes (Family Laniidae), most passerines generally feed insects and small fruits to their developing nestlings (Pinkowski 1978, Ehrlich et al. 1988, Gowaty and Plissner 1998). However, Eastern Bluebirds (Sialia sialis) occasionally have been reported to prey on vertebrates, such as shrews (Sorex spp.; Pinkowski 1974), snakes (unidentified species; Flanigan 1971), and skinks (Eumeces spp.; Pitts 1978). In a box-nesting population of Eastern Bluebirds in Oklahoma, Bay and Carter (1997) reported six different pairs of adults taking ground skinks (Scincella lateralis) as food items for nestlings over a period of several breeding seasons. Although provisioning bluebird nestlings with vertebrate food items has been observed, it is considered a rare phenomenon in passerines (Ross 1989).

During the 2003 breeding season, we monitored 20 nest boxes at Tyler State Park, in an upland, open shortleaf and loblolly pine (*Pinus echinata*, *P. taeda*, respectively) forest approximately 22 km north of Tyler, Smith County, Texas. The nest boxes, which were attached to metal T-posts 1.5 m from the ground, were monitored weekly and nesting activity was recorded.

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On 6 May 2003, we found a small (8.3 cm in length), dead flat-headed snake (*Tantilla gracilis*) in an Eastern Bluebird nest. The snake was intact and slightly desiccated, but did not have any visible external injuries. The nest had been previously checked on 29 April and contained nestlings (12–13 days old) that were within 3 days of fledging.

During visits to nest boxes at this site, we usually did not observe provisioning of young by adult birds nor did we observe Eastern Bluebirds taking prey resembling small snakes. However, we have removed Texas ratsnakes (*Elaphe obsoleta*) that had preyed on nestling Eastern Bluebirds in our nest boxes (SCB and DWP unpubl. data), but these are the only snakes we had previously recorded in nest boxes at this site.

The flat-headed snake is a small, docile, burrowing snake that eats a variety of invertebrates, such as centipedes and soft-bodied insect larvae (Werler and Dixon 2000). Adult flat-headed snakes typically range in size from 17.8 to 20.3 cm, and usually are found beneath rocks (Ford et al. 1991, Conant and Collins 1998, Werler and Dixon 2000). According to Werler and Dixon (2000), flat-headed snakes (over 500 specimens) were never caught out in the open during a long-term study of this species in Kansas. Ford et al. (1991) examined snake diversity in northeastern Texas and found a very low abundance of flat-headed snakes. They concluded that due to the burrowing nature of this species, it may be more abundant at a particular site than trap rates might indicate. At Tyler State Park, the abundance of flat-headed snakes is unknown. Due to the natural history (i.e., fossorial habits and invertebrate prey) and small size of this particular snake, it is unlikely that it was capable of climbing the T-post and entering the nest box on its own.

The primary foraging mode of Eastern Bluebirds is to scan the ground from a perch and then drop to the ground to subdue their

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prey (Pinkowski 1977). The adult Eastern Bluebird would have had no trouble subduing a prey item of this size and may have mistaken the snake for a large insect larva. Additionally, the nestlings would have had no difficulty consuming food of this size. Therefore, it appears that one of the adult Eastern Bluebirds captured this small snake on the ground and then brought it to the nest as a food item for the nestlings. It is unclear why the snake was not eaten by the nestlings, although it may be because the snake was brought to the nest very near the time of fledging.

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LITERATURE CITED

BAY, M. D. AND W. A. CARTER. 1997. Use of ground skinks (*Scincella lateralis*) as food for nestling Eastern Bluebirds (*Sialia sialis*) in Oklahoma. Bulletin of the Texas Ornithological Society 30: 23–25.

CONANT, R. AND J. T. COLLINS. 1998. A field guide to

reptiles and amphibians: eastern and central North America. Houghton Mifflin, Boston, Massachusetts.

- EHRLICH, P. R., D. S. DOBKIN, AND D. WHEYE. 1988. The birder's handbook: a field guide to the natural history of North American birds. Simon and Schuster, New York.
- FLANIGAN, A. B. 1971. Predation on snakes by Eastern Bluebird and Brown Thrasher. Wilson Bulletin 83: 441.
- FORD, N. B., V. A. COBB, AND J. STOUT. 1991. Species diversity and seasonal abundance of snakes in a mixed pine-hardwood forest of eastern Texas. Southwestern Naturalist 36:171–177.
- GOWATY, P. A. AND J. H. PLISSNER. 1998. Eastern Bluebird (*Sialia sialis*). The Birds of North America, no. 381.
- PINKOWSKI, B. C. 1974. Predation on a shrew by an Eastern Bluebird. Wilson Bulletin 86:83.
- PINKOWSKI, B. C. 1977. Foraging behavior of the Eastern Bluebird. Wilson Bulletin 89:404–413.
- PINKOWSKI, B. C. 1978. Feeding of nestling and fledgling Eastern Bluebirds. Wilson Bulletin 90:84–98.
- PITTS, T. D. 1978. Foods of Eastern Bluebird nestlings in northwest Tennessee. Journal of the Tennessee Academy of Science 53:136–139.
- Ross, D. A. 1989. Amphibians and reptiles in the diets of North American raptors. Wisconsin Endangered Species Report, no. 59.
- WERLER, J. E. AND J. R. DIXON. 2000. Texas snakes: identification, distribution, and natural history. University of Texas Press, Austin.

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Sapsuckers Usurp a Nuthatch Nest

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ABSTRACT.—We document for the first time a Red-naped Sapsucker (*Sphyrapicus nuchalis*) usurping the nest of a Red-breasted Nuthatch (*Sitta canadensis*). A nuthatch nest in the incubation phase was usurped by a male Red-naped Sapsucker on 23 May 2003, and a sapsucker nest was initiated in the cavity on 1 June. Red-naped Sapsuckers are primary cavity excavators that normally nest in live and dead quaking aspens (*Populus tremuloides*) infected with heart rot fungus (*Fomes* spp.). Red-breasted Nuthatches are weak excavators that most commonly nest in broken-topped conifer snags. Nest usurpation was likely due to a shortage of suitable nest sites in our study plot. *Received 26 April 2004, accepted 9 December 2004.*

The most common avian nest usurpers in North America are secondary cavity-nesting species, especially the European Starling (*Sturnus vulgaris*) and House Wren (*Troglodytes aedon*) (Short 1979, Lindell 1996, Doherty and Grubb 2002). Although nest usurpation has also been documented among cavity-excavators, both types are thought to be a consequence of a shortage of nest sites, com-

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